Surg. Gastroenterol. Oncol. 2021;26(1):83-89 DOI: 10.21614/sgo-26-331

Outflow Reconstruction Techniques in Living Donor Liver Transplantation

Ender Dulundu
HPB Surgery, Liver Transplantation Unit, Marmara University, School of Medicine
Istanbul, Turkey

Abstract

Liver transplantation is a therapeutic option for acute and chronic end stage liver diseases and certain hepatic malignant tumors. The growing disparity between the number of liver transplant candidates and the supply of deceased donor organs has led the increase living donor liver transplantation (LDLT). The provision of an adequate outflow is indispensable for graft function. In order to meet the metabolic demand of the recipient, the majority of the transplant centers switched to a right lobe from the left lobe LDLT which makes hepatic venous reconstruction more complicated. Additionally, the regenerative process of the hepatic allograft may lead dynamic changes in the spatial orientation of reconstructed blood vessels, especially the hepatic venous outflow. Different technical approaches and algorithms have been developed to prevent graft congestion and to perform a sufficient outflow reconstruction. In this review, several considerations of outflow reconstruction techniques are discussed on the basis of our experience and the literature.

Key words: outflow, living donor liver transplantation, outflow reconstruction technique, vascular graft